## Steaming pan of savings



It seems like a simple way for a restaurant to save 175,000 gallons of water a year, and the \$1,600-plus in water and sewer costs in Santa Barbara: Scrap the traditional steamer that uses water to cool down the excess steam, and purchase a connectionless steamer that does away with excess steam. Traditional steamers are water-intensive by incorporating a separate boiler or steam generator to produce steam for the cooking compartment. Rather than building up pressure, excess steam leaves the cooking cavity through a drain, where it is condensed by a stream of cold water. This cooling water also lowers the temperature of the condensate below 160 degrees to meet plumbing codes. A typical 6-pan boiler-

style steamer consumes 30 to 40 gallons per hour while operating, or about 175,000 gallons per year, under heavy use. A typical 6-pan "connectionless" steamer consumes a paltry 1 to 2 gallons per hour while operating at peak capacity.

"Connectionless" steamers were initially designed and marketed as requiring less maintenance than their boiler-style counterparts. Steam is generated in a reservoir at the bottom of the cooking compartment and water is added and drained manually at the beginning and end of the day. Condensed steam simply returns to the reservoir, instead of draining outside the compartment. These steamers do not require condensate-cooling water, so no continuous flow down the drain.

## Switching from old to new can save \$6,000 in first year

Bottom line: A casual dining restaurant could get more than \$6,000 in savings for the year. A field-monitoring study commissioned by two major utilities in the state found in one comparison that a connectionless steamer cost \$7 per year for water and sewer and \$571 per year for electricity, totaling \$578 per year. A boiler-based steamer, the study found, cost \$1,944 per year for water and sewer and \$4,717 per year for electricity, for an annual cost of \$6,661. With a \$6,083 per year in savings in water and energy costs, the connectionless steamer would pay for itself within one year, according to "Evaluating the Water Savings Potential of Commercial 'Connectionless' Steamers," by the Food Technology Service Center in San Ramon. Calculate potential savings at <a href="http://www.fishnick.com/saveenergy/tools/calculators/esteamercalc.php">http://www.fishnick.com/saveenergy/tools/calculators/esteamercalc.php</a>. Use a figure of \$7 in the tab for water/sewer rates in Santa Barbara.

**GET CASH BACK TO MAKE THE SWITCH**: Southern California Edison offers a rebate, which can be as high as \$750, depending on the model. Visit <a href="http://www.sce.com/ExpressEfficiency/food-service-equipment.htm">http://www.sce.com/ExpressEfficiency/food-service-equipment.htm</a> and click on the link to qualifying products.